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ABSTRACT

This report describes trends and differentials in births and birth rates for teenagers since 1970, and examines the demographic characteristics of the mothers and the health of their newborn children. A brief introduction and a review of highlights of the findings from National Vital Statistics System data is followed by discussions in several areas: (1) birth rate; (2) numbers and proportions of births; (3) birth rates by marital status; (4) numbers and ratios of births to unmarried mothers; (5) educational attainment of mothers; (6) low birth weight; (7) prenatal care; and (8) Apgar scores (used to evaluate infants' overall physical condition at birth). The data presented here focus primarily on childbearing by teenagers aged 15-19 years. Detailed in this report are some of the circumstances that accompany a birth to a teenager, including higher rates of nonmarital childbearing, lower educational attainment of the mother, higher levels of low birth weight, less prenatal care, and lower Apgar scores. Five text figures on birth rate statistics are provided and 11 detailed data tables are included. The appendix contains technical notes on sources of data, population denominators, births by marital status of mother, and computation of percent distributions. (NRB)

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Trends in Teenage Childbearing

United States
1970-81

Data From the National Vital Statistics System
Series 21 No. 41

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VITAL AND HEALTH STATISTICS

Trends in Teenage Childbearing

United States 1970-81

An analytical review of recent trends and differentials in childbearing by teenagers.

Data From the National Vital Statistics System
Series 21, No. 41

DHHS Publication No. (PHS) 84–1919

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National Center for Health Statistics
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Symbols

- - -	Data not available
. . .	Category not applicable
-	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500 where numbers are rounded to thousands
*	Figure does not meet standards of reliability or precision

Trends in Teenage Childbearing

by Stephanie J. Ventura, A. M., Division of Vital Statistics

Introduction

Teenage childbearing has received considerable attention in recent years. Interest has focused on the impact of early childbearing on completed fertility, on the family situation in which the children are raised, on the socioeconomic characteristics of women who start their childbearing at young ages, including the impact of their lower educational attainment on their future economic status, and on the health implications for mother and child. This report describes trends and differentials in births and birth rates for teenagers since 1970, as well as the demographic characteristics of the mothers and the health of their newborn children. The following data detail some of the circumstances that accompany a birth to a teenager, including higher rates of nonmarital childbearing, lower educational attainment of the mother, higher levels of low birth weight, less prenatal care, and lower Apgar scores.

Although teenage childbearing encompasses all births to women under 20 years of age, this report focuses primarily on childbearing by teenagers aged 15-19 years. The number of births and birth rates among girls under 15 years of age is relatively small: less than one-half of 1 percent of females aged 10-14 years has given birth in any year since 1970, and fewer than 13,000 births have been to girls under age 15 years in any year since 1970. The small numbers and rates do not support the more detailed demographic analysis that is possible for teenagers aged 15-19 years. In this report teenagers are also referred to as women under age 20, and the terms are used interchangeably.

Highlights

Both the number of births and the birth rates for mothers under 20 years of age declined during the 1970's. There were 537,024 births to teenagers in 1981, 18 percent fewer than were registered in 1970. The birth rate for young teenagers was 32.1 births per 1,000 women aged 15-17 years in 1981, 17 percent below the rate for 1970 (38.8). The rate for older teenagers 18-19 years of age was 81.7 in 1981, a 29-percent reduction from the 1970 rate (114.7). The decline for young teenagers aged 15-17 years was relatively modest, compared with the trends in birth rates for most women aged 18 years and older; rates for women aged 18-29 and 35-49 years fell by 23 to 60 percent. Until 1973, the rates for young teenagers were increasing while those for older women were declining rapidly.

The recent decline in the number of births to teenagers is associated with declines both in the birth rates and in the number of teenage women. This population dropped 4 percent between 1980 and 1981 and will continue to decline over the next several years as girls born in the low-birth years of the early 1970's reach the childbearing ages.

Although teenage birth rates declined over the past decade, the trend between 1978 and 1981 was relatively stable. It is still too soon to tell if the previous downward course is shifting or if the rates have leveled off only temporarily.

The decline in the birth rates for teenagers reflects declines in both the rates for first births and the rates for higher order births. In other words, there have been similar reductions in the risk of a teenager giving birth for the first time as well as having second and higher order births.

Teenage mothers are accounting for a smaller proportion of all births. In 1981, 15 percent of all births were to mothers under 20, compared with 18 percent in 1970. This decline is accounted for by both the reduction in teenage births and the sizeable increase in births, especially first births, to mothers in their thirties. There was little change in the proportions of teenage births occurring to younger and older teenagers between 1970 and 1981. For example, young teenagers aged 15-17 years accounted for about one-third of all births to teenagers in both 1970 and 1981.

Although teenage fertility has generally fallen, childbearing by unmarried teenagers has generally risen. In 1981, there were 267,828 births to unmarried women under 20 years of age, a 34-percent increase over the estimate for 1970 (199,900). The birth rate for young unmarried teenagers increased from 17.1 births per 1,000 unmarried women 15-17 years of age in 1970 to 20.9 in 1981, a rise of 22 percent. The rate for older teenagers increased 21 percent, from 32.9 births per 1,000 unmarried women 18-19 years of age in 1970 to 39.9 in 1981. As a consequence of the increasing rates of nonmarital childbearing by teenagers and the generally falling rates of births to married teenagers, a growing proportion of births to teenagers is occurring to unmarried women. Among births to teenagers 15-17 years of age, this proportion increased from 43 percent in 1970 to 63 percent in 1981. The proportion of births to older unmarried mothers 18-19 years of age increased from 22 percent to 41 percent during this period.

During the 1970's the differential in birth rates between white and black teenagers narrowed considerably as rates for black teenagers fell more sharply than did rates for white teenagers. The principal factor accounting for the narrowing of the racial differential is the contrasting trends in birth rates observed for white and black unmarried teenagers: rates for unmarried white women increased by 40 to 65 percent between 1970 and 1981, while rates for unmarried black women declined by 14 percent.

The educational attainment of teenage mothers is rather limited, as would be expected. Among teenage mothers 15-17 years of age giving birth in 1981, only 10 percent had completed high school. Even among older teenage mothers 18-19 years, just 54 percent had completed at least 12 years of schooling. By comparison, 65 percent of all women of these ages had completed high school.

The incidence of low-birth weight is much greater among babies born to teenage mothers than among babies born to mothers aged 20 years and older. Among births to 15-17 year old mothers in 1981, 11 percent weighed less than 2,500 grams (5 pounds, 8 ounces) at birth, compared with 7 percent for births to mothers aged 20-24 years.

Teenage mothers are more likely than older mothers to receive delayed or no prenatal care, and less likely to begin care early in pregnancy. In 1981, 1 in 8 mothers aged 15-17 years received delayed care (beginning in the third trimester) or no care, compared with 1 in 18 mothers aged 20-24 years.

Births to teenage mothers are more likely than births to older mothers to exhibit some kind of stress or physical depression at birth. Apgar scores of less than 7 were more common among births to younger teenagers age 17 years and under than among births to mothers in their twenties.

Birth rate

The birth rate for younger teenage girls was 32.1 births per 1,000 women aged 15-17 years in 1981, 17 percent below the 1970 rate of 38.8 (table 1). During the 1970's, the trend in the rate for this age group was down from 1972 (39.0) to 1978 (32.2), and was relatively stable thereafter. The decline was similar but more pronounced for older teenagers 18-19 years, with the birth rate declining from 114.7 in 1970 to 81.7 in 1981, a 29-percent reduction. The decline in childbearing rates for younger teenagers begun in 1973 is generally comparable to that observed for older teenagers and mothers in their twenties, except that the decline in rates for mothers aged 18-29 years began earlier (figure 1).

Between 1966 and 1968, birth rates for teenagers in the age groups 15-17 and 18-19 years declined. The trends in the rates for younger and older teenagers began to diverge in 1968. The rates for teenagers aged 15-17 years generally increased from 1968 to 1972 and then declined through 1978; from 1978 to 1981 the rate changed little. The rates for older teenagers continued to decline steadily through 1976; since then the rate has generally increased slightly.

The birth rates by race presented in figure 2 show that

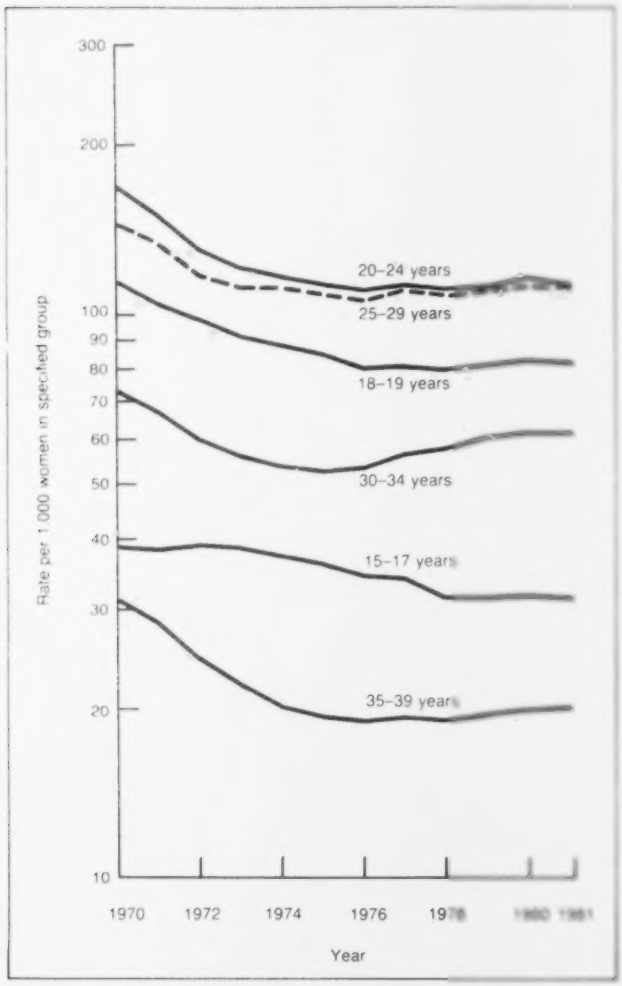

Figure 1. Birth rates by age of mother: United States, 1970–81

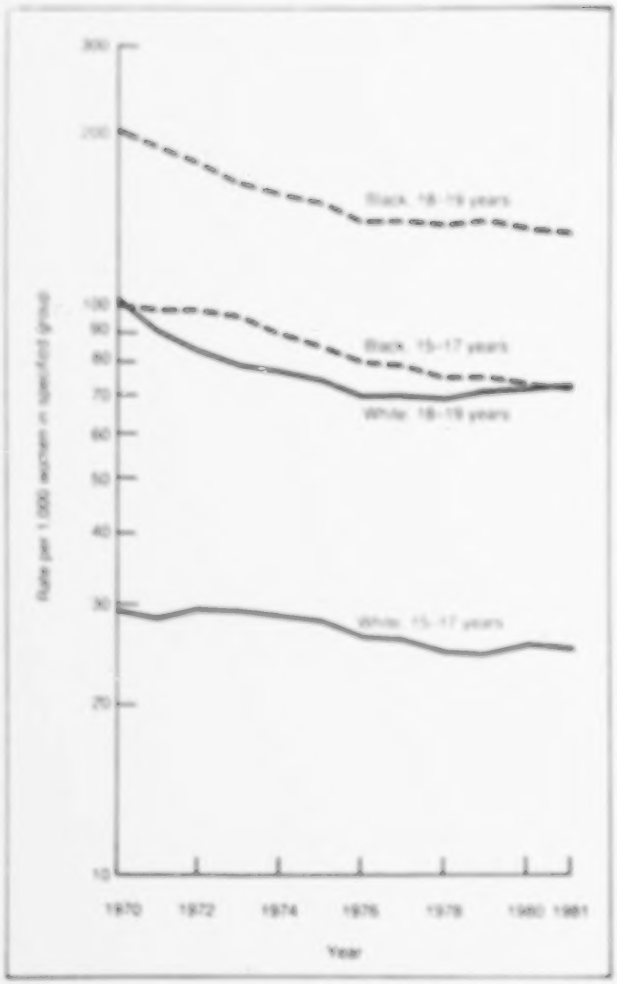

Figure 2. Birth rates for women aged 15–17 and 18–19 years, by race of child: United States, 1970–81

between 1970 and 1981 the birth rates for black teenagers fell somewhat more sharply than for white teenagers, particularly the rates for younger teenagers aged 15-17, for whom the rate declined by 14 percent for white women and 30 percent for black women between 1970 and 1981. As a result of the relatively greater decline in the birth rate for black teenagers than for white teenagers aged 15-17 years, the gap between their rates narrowed somewhat during this period. The decline in black teenage fertility is associated with a reduction in nonmarital birth rates for black teenagers. By comparison, the decline in white teenage fertility has been reversed in recent years, reflecting the increase in nonmarital fertility among white teenagers.

The first-birth rate for young teenagers declined 17 percent, from 33.8 first births per 1,000 women 15-17 years of age in 1970 to 28.0 in 1981; the rate for 18-19 year old teenagers declined by 30 percent, from 84.9 to 59.5 (table 2). These relative declines were similar to those for second and higher order birth rates for teenagers. The rate for second and higher order births to teenagers aged 15-17 years declined 18 percent, from 5.0 to 4.1, while this rate for older teenagers declined 26 percent, from 29.8 to 22.2. In other words, first-time as well as repeat childbearing by teenagers declined during the 1970's.

First-birth rates by race show a smaller racial differential than birth rates for all other birth orders combined do. Thus, the overall gap in fertility between white and black teenagers is partly accounted for by the much higher level of second and higher order births for black than for white teenagers.

Numbers and proportions of births

Women under 20 years of age gave birth to 537,024 babies in 1981 (table 3). Of these, 37 percent were to teenagers aged 17 years and under. Between 1970 and 1981 there were declines in the number of births to teenagers of all ages, 18 percent overall, but the declines were somewhat greater for older teenagers (19 percent) than for younger teenagers aged 17 and under (16 percent). The number of births to teenagers 18-19 years of age would have fallen more if it were not for the 13-percent increase in the number of women in that age group. By contrast the number of teenagers aged 15-17 years increased by only 1 percent during this period, and thus was not a factor in the trend in the number of births to women in this age group.

Speculation on future trends in the number of births to teenagers is precarious. However, it is clear that the number of teenagers aged 15-19 years has begun to decline. Between 1979 and 1980, the decline was 1 percent, and between 1980 and 1981, the decline was 4 percent. The population under 15 years of age has also fallen. Therefore, if teenage birth rates remain at their present levels, a continued decline in the number of births to teenagers can be anticipated over the next several years. If birth rates for teenagers turn upward, the number of births to teenagers might remain at current levels or increase slightly. Rates would have to increase sharply for there to be a substantial increase in the number of births.

Both white and black births to teenagers declined during the 1970's through 1981, but the relative declines differed somewhat by age. Among births to teenagers 15-17 years, white births fell by 16 percent and black births by 20 percent. In contrast, declines in births to older teenagers were relatively greater for white births (22 percent) than for black births (14 percent).

There was an important shift in the distribution of births toward older mothers between 1970 and 1981. Births to teenagers accounted for 18 percent of all births in 1970, compared with 15 percent in 1981 (table 4). The relative number of births to mothers aged 20-24 years also declined during this period; however, births to mothers aged 25 and older increased from 44 percent of the total in 1970 to 52 percent in 1981. The increased tendency for childbearing to commence at later ages has been discussed in another report.[1] These changing distributions of births by age of mother were observed for both white and black births. Teenage mothers are accounting for fewer births as well as a declining share of total births.

Birth rates by marital status

Rates of childbearing by unmarried teenagers increased steadily during the 1970's, with increases of 21 to 22 percent between 1970 and 1981 (table 5). However, figure 3 shows there has been an important shift in the rates for all unmarried post-teenagers. Regardless of age among women aged 20 and older there was a decline in the early 1970's followed by a steady increase in the birth rates since the middle to late 1970's. It appears that childbearing by unmarried women is becoming a factor of growing importance in the fertility of all women, although it is still most critical for teenagers. Nonmarital birth rates are now highest for women 18-19 and 20-24 years of age, while in 1970 the rates were highest for 20-24 and 25-29 year old women.

The increases in nonmarital birth rates for teenagers were confined to white women, for whom the rates increased by 65 percent for the age group 15-17 years and 40 percent for ages 18-19 years (figure 4). Rates for black women declined by 14 percent for both younger and older teenagers. The increases in rates for white teenagers and the reductions in rates for black teenagers have been fairly steady, especially since the early 1970's. The diverging trends in rates for white and black teenagers are also observed for older women. Rates for white women increased between 1970 and 1981, except for rates for women aged 30 years and older that declined by 4 to 10 percent. By contrast, all age-specific birth rates for unmarried black women declined during this period; for women aged 20 and older, the declines ranged from 14 to 44 percent.

As a result of the contrasting trends in nonmarital childbearing between white and black teenagers, the differential between the racial groups narrowed substantially during the 1970's. In 1970, the rate for black women 15-17 years old was 10 times the rate for white women of the same age; by 1981, this differential was 5. Similarly the racial differential for older teenagers aged 18-19 years declined from 8 to 5 during this period.

Because the increases in birth rates for unmarried teenagers occurred while overall birth rates for teenagers declined, it is apparent that the rates for married teenagers must have declined (figure 5). The birth rate for young married teenagers, aged 15-17 years, declined 41 percent between 1970 and 1981, and the rate for older married teenagers was 18 percent lower (see also table 5). However, the rates in 1981 are still very high—427.3 births per 1,000 married women aged 15-17 years and 315.4 births per 1,000 married women aged 18-19 years. Birth rates for older married teenagers, although

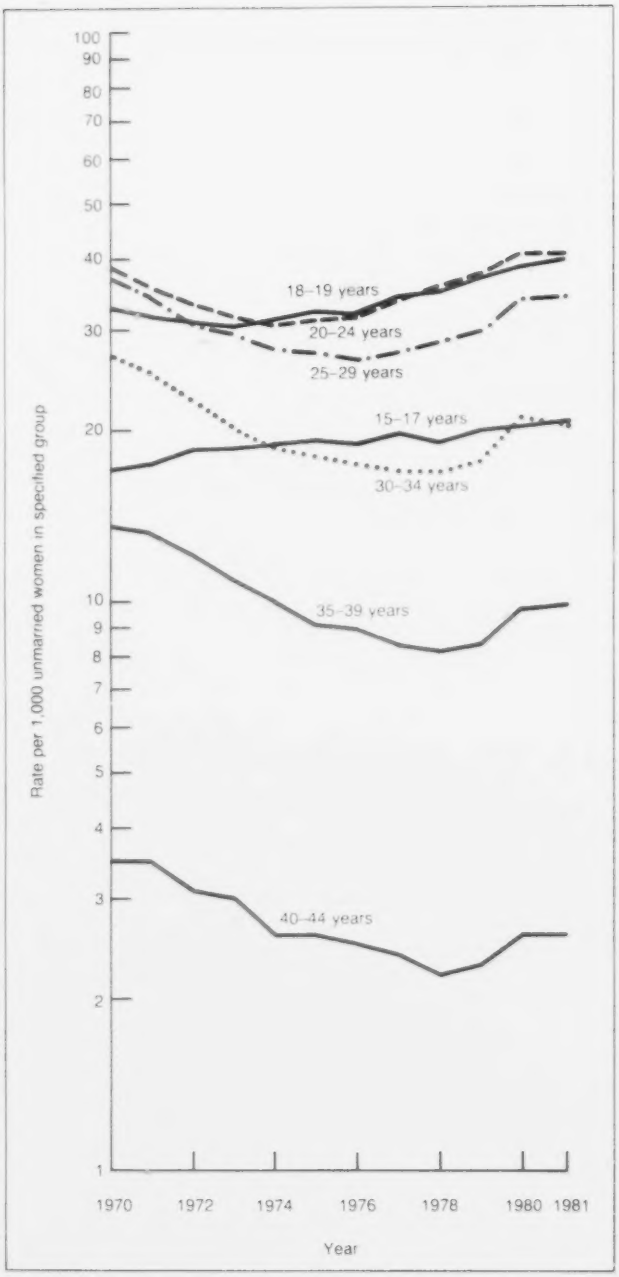

Figure 3. Birth rates for unmarried women, by age of mother: United States, 1970–81

lower in 1981 than in 1970, have increased considerably in recent years. The rate for 18-19 year olds was at its lowest point in 1976, at 265.8. Between 1976 and 1981 the rate climbed to 315.4, a 19-percent increase.

The high birth rates for married teenagers reflect the fact that many of these women were already pregnant at the time of marriage. Data from the June 1980 Current Population Survey on the fertility of American women indicate that about one-third of the teenagers 14-17 years of age who first married in 1975-79 were already pregnant at the time of marriage.[2]

However, the sharply reduced rates for married teenagers between 1970 and 1981 suggest a declining tendency for younger teenagers to marry following the discovery of a pregnancy. Rather they are choosing to have the baby and keep the child as an unmarried mother, or to have an abortion. Estimates of pregnancies by outcome of pregnancy for 1980 showed that 41 percent of pregnancies to teenagers aged 15-19 years were terminated by abortion, compared with 36 percent in 1976.[3]

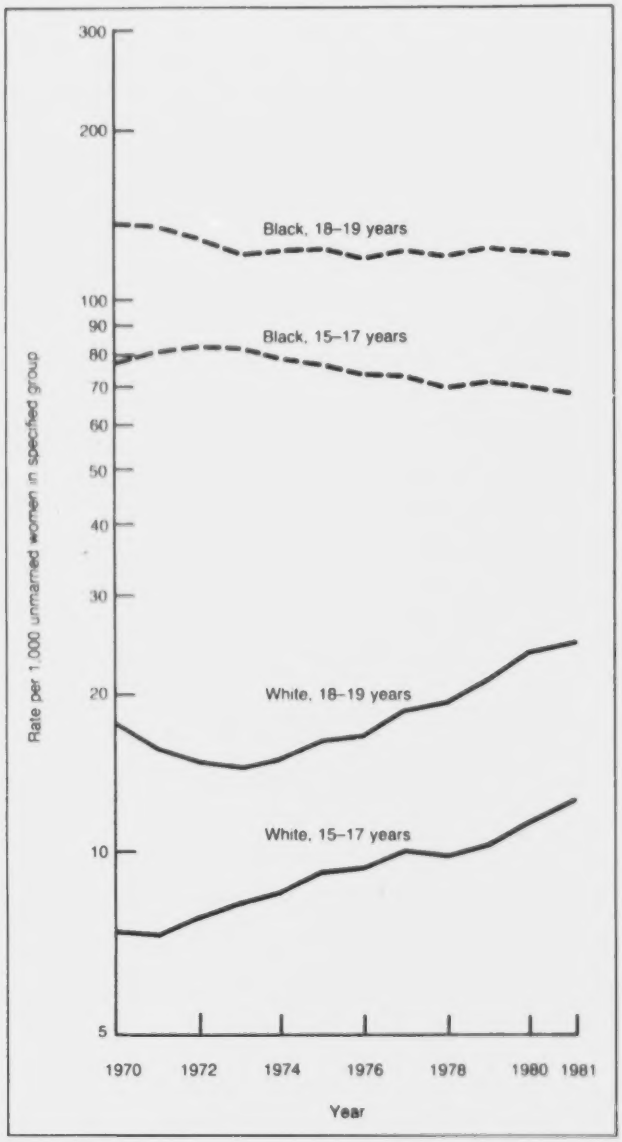

Figure 4. Birth rates for unmarried women aged 15–17 and 18–19 years, by race of child: United States, 1970–81

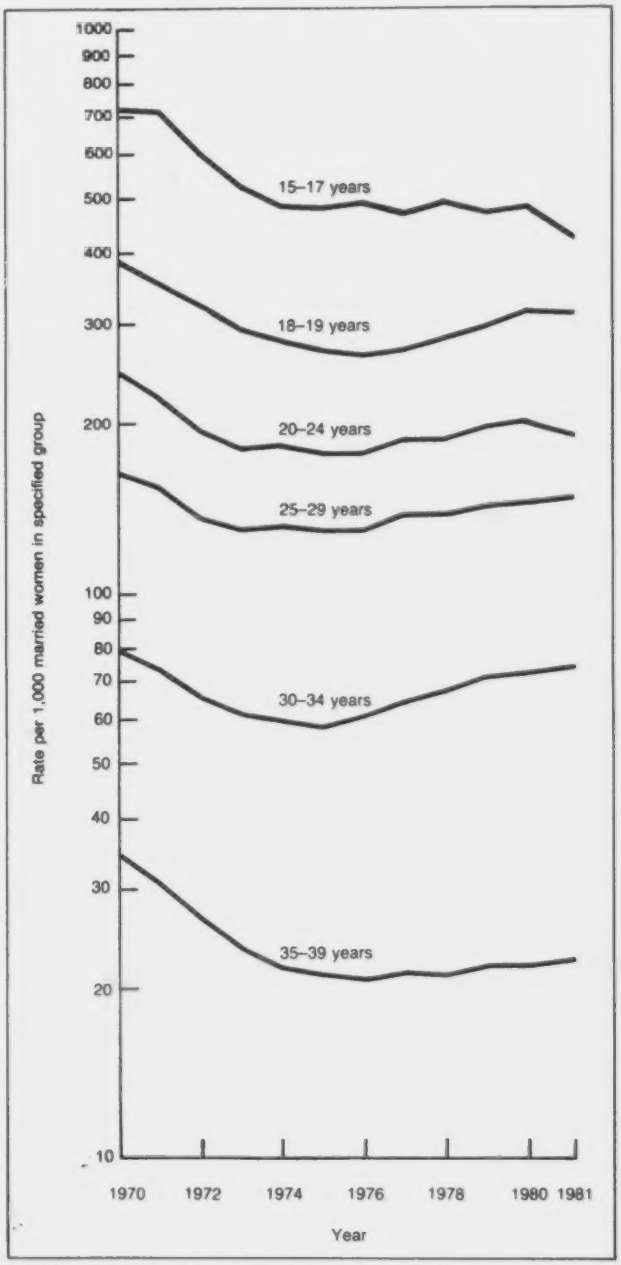

Figure 5. Birth rates for married women, by age of mother: United States, 1970–81

Numbers and ratios of births to unmarried mothers

The number of births to unmarried teenagers increased substantially during the 1970's. In 1981, 267,828 babies were born to unmarried mothers under 20 years old; of these 44 percent were in the age group 15-17 years. The comparable figures for 1970 were 199,900 births to unmarried teenagers of whom 48 percent were in the age group 15-17 years (table 6).

Until the mid-1970's, the increases in nonmarital births to younger teenagers were due to two factors: the increasing rate of childbearing by unmarried teenagers and the continued growth of the younger teenage population. More recently, the younger teenage population has stabilized and begun to decline; therefore, the rising numbers of nonmarital births are due solely to the increasing birth rates among young unmarried teenagers.

By contrast, the increase in the number of births to older unmarried teenagers throughout the 1970's is associated with the growing number of unmarried women 18-19 years of age as well as the rising rate of nonmarital childbearing among these women.

Both white and black nonmarital births to teenagers generally increased between 1970 and 1981, but the increases were much greater for white births. White births increased 60 percent for 15-17 year olds and 65 percent for 18-19 year olds, while black births declined 1 percent for young teenagers and increased 33 percent for older teenagers.

As a consequence of the rising numbers and rates of nonmarital childbearing and generally declining marital fertility among teenagers, the proportion of all teenage births occurring to unmarried mothers increased sharply between 1970 and 1981 (table 7). Among younger teenagers, the proportion increased from 43 percent to 63 percent, while among older teenagers the increase was from 22 percent to 41 percent. Overall, half of all babies born to mothers under 20 years of age in 1981 were to unmarried mothers, a substantial increase from 1970 (30 percent). Thus, a large and growing proportion of infants are being born to single mothers, with the less favorable social, economic, and health status that tends to be associated with such births.

Educational attainment

Young mothers are much less likely to have completed high school than are mothers in their twenties. In 1981, 54 percent of 18-19 year old mothers had completed high school, compared with about four-fifths of mothers in their twenties (table 8). This indicates that regardless of the support system that may be available to teenage mothers-to-be in terms of at least completing high school, relatively few of them are actually finishing the basic 12-year program. A comparison of the educational attainment of teenage mothers with all women the same age clarifies this point: Although just 54 percent of teenage mothers aged 18-19 years giving birth in 1981 had completed high school, Current Population Survey data for 1981 show that 65 percent of all women in this age group were high school graduates.[4] For 19 year old women who certainly have had the opportunity to complete high school, the difference is more striking. Only 61 percent of 19 year old mothers had completed high school in 1981, compared with 79 percent of all 19 year old women. The relationships between age of mother and educational attainment were similar for white and black teenage mothers.

Marital status of the mother is a factor in determining educational attainment for both younger and older teenage mothers, but it becomes a more critical factor for mothers aged 20 and older. In 1981, the proportions of mothers with at least a high school education were somewhat greater for married than for unmarried mothers at each age for teenagers. For all ages under 20, within each marital status category, black mothers were more likely than white mothers to have a high school diploma. At ages 20 and older, there is an increasing gap in educational attainment between married and unmarried mothers of both races. Although unmarried mothers of both races were about equally likely to have completed high school, white married mothers were increasingly more likely than black married mothers to have attained this level of education.

Clearly younger mothers have not had the opportunity to complete as many years of schooling as have older mothers. Not only is education critical in determining the mother's future economic opportunity, it is also a key factor in determining the extent of low birth weight, even more than when prenatal care began.[5]

Low birth weight

Because teenage mothers have not reached full physical maturity in many cases, their babies are less likely to be fully developed at birth. Low weight babies in turn are subject to higher rates of infant mortality, mental retardation, and birth defects. Data on low birth weight shown in table 9 substantiate the higher-risk status of infants born to teenage mothers. In 1981, 14 percent of babies born to mothers under 15 years of age weighed less than 2,500 grams (5 pounds, 8 ounces) at birth, compared with 11 percent of births to mothers aged 15-17 and 9 percent for babies born to 18-19 year olds. Levels of low birth weight are most favorable (6 percent) for births to mothers aged 25-29 and 30-34 years.

The relationship between age of mother and low birth weight is generally evident for both white and black births and for births to married and unmarried mothers. Births to black mothers and unmarried mothers are more likely to be of low birth weight than births to white mothers and married mothers, but in virtually every case, the risk of low birth weight was greatest for younger mothers. In the case of births to black unmarried mothers the pattern by age of mother was not as striking. Levels of low birth weight were high for these births regardless of age of mother.

Prenatal care

Teenage mothers are more likely than older mothers to delay seeking prenatal care until late in pregnancy or to receive no care at all. In 1981, 12 percent of 15-17 year old mothers, compared with 6 percent of 20-24 year old mothers, did not receive prenatal care until the last trimester or received no care at all. Mothers under age 15 years were more likely than any other age group to receive delayed or no care, 20 percent in 1981 compared with 10 percent for 18-19 year old mothers (table 10).

Similarly, very young mothers were least likely to receive care beginning in the first trimester of pregnancy; only 36 percent of mothers under age 15 and 49 percent of mothers aged 15-17 years, compared with 74 percent of 20-24 year old mothers first sought care in the critical first trimester.

The relationships between age of mother and onset of prenatal care hold for white and black mothers, although white mothers were more likely to receive early care than black mothers were.

Although other evidence suggests that the mother's educational attainment is a more important predictor of low birth weight than the time when prenatal care was begun,[5] it is likely that early establishment of prenatal care can help mitigate the otherwise negative impact of young motherhood on pregnancy outcome, in terms of such factors as counseling on prenatal nutrition and early detection of complications of pregnancy.

Apgar score

The Apgar score is a summary measure used to evaluate the newborn infant's overall physical condition at birth. The score is a composite evaluation of five factors—the infant's heart rate, respiratory effort, muscle tone, irritability, and color—each of which is assigned a value from 0 to 2. The overall score is the sum of the five values, with a score of 10 being optimum.

Births to teenage mothers are more likely than births to older mothers to score in the depressed range (under 7) at either 1 or 5 minutes after birth (table 11). In 1981, for example, 15 percent of babies born to mothers under 15 years of age and 13 percent of babies born to 15-17 year old mothers scored less than 7 at 1 minute, compared with 10 percent of births to 20-24 year old mothers. Scores in the depressed range were relatively less frequent at 5 minutes after birth but there was still a differential by age of mother: 4 percent of births to the youngest mothers, compared with 2 percent of births to mothers in their early twenties received low scores.

The relationships between Apgar scores and age of mother were similar within each racial group except that scores for black infants were generally lower at each age, and were less likely to improve from 1 to 5 minutes than scores for white infants.

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Table 1. Birth rates for women under 20 years of age, by race of child: United States, 1970–81

[Rates are live births per 1,000 women in specified group]

Age of mother and race of child	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
10–14 years												
All races	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1	1.2
White	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
All other	3.6	3.9	4.1	4.0	4.3	4.3	4.7	4.6	5.0	4.7	4.7	4.8
Black	4.1	4.3	4.6	4.4	4.7	4.7	5.1	5.0	5.4	5.1	5.1	5.2
15–17 years												
All races	32.1	32.5	32.3	32.2	33.9	34.1	36.1	37.3	38.5	39.0	38.2	38.8
White	25.1	25.2	24.7	24.9	26.1	26.3	28.0	28.7	29.2	29.3	28.5	29.2
All other	65.2	68.3	70.5	70.4	74.8	75.5	80.5	84.9	90.5	93.8	94.0	95.2
Black	70.6	73.6	75.7	75.0	79.6	80.3	85.6	90.0	96.0	99.5	99.4	101.4
18–19 years												
All races	81.7	82.1	81.3	79.8	80.9	80.5	85.0	88.7	91.2	96.9	105.3	114.7
White	71.9	72.1	71.0	69.4	70.5	70.2	74.0	77.3	79.3	84.3	92.3	101.5
All other	130.8	133.2	134.9	134.4	136.8	137.2	146.1	153.1	160.9	173.3	185.6	195.4
Black	135.9	138.8	140.4	139.7	142.9	142.5	152.4	158.7	166.6	179.5	192.6	204.9

Table 2. Birth rates by live-birth order for women 15–17 and 18–19 years of age, by race of child: United States, 1970–81

[Rates are live births per 1,000 women in specified group. Figures for live-birth order not stated are distributed]

Age of mother, live-birth order, and race of child	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
15–17 years												
First child												
All races	28.0	28.5	28.4	28.3	29.8	30.1	32.0	33.0	34.2	34.5	33.3	33.8
White	22.5	22.7	22.3	22.4	23.6	23.9	25.4	26.1	26.8	26.8	25.8	26.4
All other	54.0	57.1	59.1	58.6	62.5	63.1	67.6	71.2	75.8	78.1	76.6	77.2
Black	58.2	61.3	63.3	62.3	66.2	66.9	71.7	75.3	80.1	82.5	80.8	82.0
Second child and over												
All races	4.1	4.0	3.9	4.0	4.1	4.0	4.1	4.3	4.3	4.5	4.9	5.0
White	2.5	2.5	2.4	2.4	2.5	2.4	2.5	2.6	2.5	2.5	2.7	2.7
All other	11.2	11.2	11.4	11.8	12.3	12.4	12.9	13.7	14.8	15.8	17.4	18.0
Black	12.4	12.3	12.4	12.7	13.4	13.5	13.9	14.7	15.9	17.0	18.6	19.4
18–19 years												
First child												
All races	59.5	59.7	59.0	57.7	58.4	58.2	61.8	64.9	67.5	71.9	77.6	84.9
White	54.7	54.8	53.8	52.4	53.1	53.1	56.3	59.3	61.7	65.7	71.7	79.3
All other	83.4	84.9	85.9	85.3	86.9	86.5	92.0	96.5	101.5	109.1	114.2	118.9
Black	85.5	87.3	88.3	87.6	89.7	88.6	95.1	98.9	103.7	111.8	116.9	123.1
Second child and over												
All races	22.3	22.4	22.3	22.2	22.5	22.3	23.2	23.8	23.7	25.0	27.7	29.8
White	17.2	17.4	17.2	17.0	17.4	17.1	17.6	18.0	17.6	18.5	20.6	22.2
All other	47.4	48.3	49.0	49.1	49.9	50.8	54.0	56.6	59.3	64.2	71.4	76.5
Black	50.5	51.4	52.1	52.1	53.2	53.8	57.3	59.8	62.8	67.8	75.7	81.9

Table 3. Number of live births to mothers under 20 years of age, by race of child: United States, 1970–81

Age of mother and race of child	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
10–14 years												
All races	9,632	10,169	10,699	10,772	11,455	11,928	12,642	12,529	12,861	12,082	11,578	11,752
White	3,970	4,171	4,402	4,512	4,671	5,054	5,073	5,053	4,907	4,573	4,130	4,320
All other	5,662	5,998	6,297	6,260	6,784	6,874	7,569	7,476	7,954	7,509	7,448	7,432
Black	5,425	5,793	6,139	6,068	6,582	6,661	7,315	7,291	7,778	7,363	7,264	7,274
15–17 years												
All races	187,397	198,222	200,137	202,661	213,788	215,493	227,270	234,177	238,403	236,641	226,298	223,590
White	120,913	127,657	127,970	130,957	138,223	139,901	148,344	152,257	153,416	150,897	143,806	143,646
All other	66,484	70,565	72,167	71,704	75,565	75,592	78,926	81,920	84,987	85,744	82,492	79,944
Black	61,850	65,966	67,728	67,317	71,182	71,429	74,946	77,947	81,158	82,217	79,238	76,882
18–19 years												
All races	339,995	353,939	349,335	340,746	345,366	343,251	354,968	361,272	365,693	379,639	401,644	421,118
White	249,100	260,401	255,837	249,103	253,960	253,374	261,785	267,895	271,417	283,089	302,920	319,962
All other	90,895	93,538	93,498	91,643	91,406	89,877	93,183	93,377	94,276	96,550	98,724	101,156
Black	81,428	84,387	85,077	83,684	84,008	82,507	86,098	86,483	87,615	90,132	92,446	94,944

Table 4. Number of live births by race of child and percent distribution by age of mother, according to race of child: United States, 1970–81

Age of mother and race of child	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
All races[1]						Number						
Live births	3,629,238	3,612,258	3,494,398	3,333,279	3,326,632	3,167,788	3,144,198	3,159,958	3,136,965	3,258,411	3,555,970	3,731,386
						Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3
15–17 years	5.2	5.5	5.7	6.1	6.4	6.8	7.2	7.4	7.6	7.3	6.4	6.0
18–19 years	9.4	9.8	10.0	10.2	10.4	10.8	11.3	11.4	11.7	11.7	11.3	11.3
20–24 years	33.4	33.9	34.0	34.2	34.5	34.5	34.8	35.1	35.1	36.0	38.1	38.0
25–29 years	31.1	30.7	30.6	30.5	30.5	30.7	29.8	29.2	28.3	27.6	26.6	26.7
30 years and over	20.7	19.8	19.4	18.7	17.8	16.8	16.5	16.5	16.9	17.0	17.3	17.7
White						Number						
Live births	2,908,669	2,898,732	2,808,420	2,681,116	2,691,070	2,567,614	2,551,996	2,575,792	2,551,030	2,655,558	2,919,746	3,091,264
						Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
15–17 years	4.2	4.4	4.6	4.9	5.1	5.4	5.8	5.9	6.0	5.7	4.9	4.6
18–19 years	8.6	9.0	9.1	9.3	9.4	9.9	10.3	10.4	10.6	10.7	10.4	10.4
20–24 years	33.3	33.9	33.9	34.1	34.5	34.6	35.1	35.4	35.4	36.5	38.9	38.6
25–29 years	32.5	32.2	32.2	32.1	32.3	32.5	31.7	31.2	30.4	29.5	28.2	28.1
30 years and over	21.4	20.4	20.1	19.5	18.5	17.4	17.0	16.9	17.4	17.4	17.5	17.9
Black						Number						
Live births	587,797	589,616	577,855	551,540	544,221	514,479	511,581	507,162	512,597	531,329	564,992	572,352
						Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.4	1.3	1.3
15–17 years	10.5	11.2	11.7	12.2	13.1	13.9	14.6	15.4	15.8	15.5	14.0	13.4
18–19 years	13.9	14.3	14.7	15.2	15.4	16.0	16.8	17.1	17.1	17.0	16.4	16.6
20–24 years	35.4	35.5	35.7	35.7	35.1	34.8	34.4	34.3	34.1	34.1	35.0	34.5
25–29 years	23.7	23.0	22.5	22.0	21.6	21.0	19.7	18.8	17.8	17.7	17.9	18.4
30 years and over	15.5	15.0	14.3	13.8	13.5	13.0	13.0	13.1	13.7	14.4	15.4	15.8

[1] Includes races other than white and black.

Table 5. Birth rates by marital status of mother for women 15–17 and 18–19 years of age, and by race of child for unmarried women: United States, 1970–81

(Rates are live births per 1,000 women in specified group)

Marital status of mother, age of mother, and race of child	1981 [1]	1980		1979 [2]	1978 [2]	1977 [2]	1976 [2]	1975 [2]	1974 [2]	1973 [2]	1972 [2]	1971 [2]	1970 [2]
		Reported and or inferred [1]	Estimated [2]										
Married													
15–17 years	427.3	486.1	481.5	473.4	489.8	471.6	490.6	482.1	484.4	527.4	602.8	712.5	720.3
18–19 years	315.4	318.0	319.7	299.2	284.7	271.1	265.8	270.6	281.0	292.1	324.6	354.1	386.3
Unmarried													
15–17 years													
All races	20.9	20.6	20.7	19.9	19.1	19.8	19.0	19.3	18.8	18.7	18.5	17.5	17.1
White	12.4	11.8	11.7	10.8	10.3	10.5	9.7	9.6	8.8	8.4	8.0	7.4	7.5
All other	60.3	63.1	64.0	64.8	63.2	67.2	67.5	70.7	73.2	75.6	77.6	75.4	73.3
Black	66.9	69.6	70.6	71.0	68.8	73.0	73.5	76.8	78.6	81.2	82.8	80.7	77.9
18–19 years													
All races	39.9	39.0	38.7	37.2	35.1	34.6	32.1	32.5	31.2	30.4	30.9	31.7	32.9
White	24.6	23.6	22.8	21.0	19.3	18.7	16.9	16.5	15.3	14.9	15.1	15.8	17.6
All other	109.0	111.6	113.4	115.3	111.6	112.7	108.9	114.3	113.4	112.8	119.3	125.4	126.5
Black	117.6	120.2	121.8	123.3	119.6	121.7	117.9	123.8	122.2	120.5	128.2	135.2	136.4

[1] Data for States in which marital status was not reported have been inferred from other items on the birth certificate and included with data from the reporting States; see Technical notes.

[2] Births by marital status are estimated for the United States from data for registration areas in which marital status of mother was reported; see Technical notes.

Table 6. Number of live births to unmarried mothers under 20 years of age, by race of child: United States, 1970–81

Age of mother and race of child	1981 [1]	1980		1979 [2]	1978 [2]	1977 [2]	1976 [2]	1975 [2]	1974 [2]	1973 [2]	1972 [2]	1971 [2]	1970 [2]
		Reported and/or inferred [1]	Estimated [2]										
10–14 years													
All races	8,589	9,024	9,200	9,500	9,400	10,100	10,300	11,000	10,600	10,900	9,900	9,500	9,500
White	3,030	3,144	3,200	3,300	3,300	3,400	3,500	3,600	3,300	3,200	2,700	2,500	2,500
All other	5,559	5,880	6,000	6,200	6,100	6,700	6,800	7,500	7,300	7,700	7,200	7,100	7,000
Black	5,361	5,707	5,800	6,100	5,900	6,500	6,600	7,200	7,100	7,500	7,100	6,900	6,800
15–17 years													
All races	118,608	121,900	122,600	120,100	116,500	120,900	116,400	116,800	113,000	111,300	108,500	100,800	96,100
White	57,881	57,761	57,500	54,300	52,500	53,800	50,000	48,900	44,800	42,400	39,900	36,200	36,200
All other	60,727	64,139	65,100	65,800	64,000	67,100	66,500	67,900	68,300	69,000	68,500	64,700	60,000
Black	57,882	61,204	62,100	62,900	61,200	64,500	64,100	65,500	66,100	67,000	66,600	63,100	58,400
18–19 years													
All races	140,631	140,877	139,800	133,100	123,200	118,800	108,500	105,800	97,700	93,500	93,700	93,200	94,300
White	71,105	70,223	68,000	62,100	56,000	53,300	47,600	45,000	40,200	38,700	38,700	39,900	43,200
All other	69,526	70,654	71,800	70,900	67,200	65,500	60,900	60,700	57,500	54,800	55,100	53,500	51,100
Black	65,601	66,818	67,700	67,100	64,000	62,700	58,500	58,200	55,200	52,900	53,200	51,800	49,500

[1] For 41 States and the District of Columbia marital status of mother is reported on the birth certificate, and for 9 States mother's marital status is inferred from other items on the birth certificate; see Technical notes.

[2] Births to unmarried women are estimated for the United States from data for registration areas in which marital status of mother was reported.

Table 7. Ratios of births to unmarried mothers to total births for mothers 15–17 and 18–19 years of age, by race of child: United States, 1970–81

[Ratios of births to unmarried women per 1,000 total live births in specified group]

Age of mother and race of child	1981 [1]	1980		1979 [2]	1978 [2]	1977 [2]	1976 [2]	1975 [2]	1974 [2]	1973 [2]	1972 [2]	1971 [2]	1970 [2]
		Reported and/or inferred [1]	Estimated [2]										
15–17 years													
All races	632.9	615.0	618.5	600.1	574.9	565.5	540.2	513.9	482.5	466.9	458.5	445.4	429.8
White	478.7	452.5	450.4	424.3	400.9	389.2	357.4	329.6	294.2	276.4	264.4	251.7	252.0
All other	913.4	908.9	922.6	911.8	892.6	888.0	879.7	860.3	833.7	811.9	798.9	784.3	750.5
Black	935.8	927.8	941.4	928.7	909.1	906.1	897.4	874.0	848.0	825.6	810.1	796.3	759.6
18–19 years													
All races	413.6	398.0	395.0	381.0	361.6	344.0	316.1	298.1	270.4	255.7	246.8	232.0	223.9
White	285.4	269.7	261.1	242.7	224.8	209.9	187.9	171.9	150.1	142.6	136.7	131.7	135.0
All other	764.9	755.4	767.6	758.3	733.3	716.6	677.6	651.4	615.8	581.3	570.7	541.9	505.2
Black	805.6	791.8	802.3	788.7	764.8	746.4	709.0	676.0	638.3	603.8	590.2	560.3	521.4

[1] For 41 States and the District of Columbia, marital status of mother is reported on the birth certificate, and for 9 States mother's marital status is inferred from other items on the birth certificate; see Technical notes.

[2] Births to unmarried women are estimated for the United States from data for registration areas in which marital status of mother was reported.

Table 8. Percent of births to mothers who have completed 12 or more years of school, by age and marital status of mother and race of child: Total of 47 reporting States and the District of Columbia, 1981

[Based only on records for which educational attainment is stated. For 41 States and the District of Columbia, marital status of mother is reported on the birth certificate, and for 9 States mother's marital status is inferred from other items on the birth certificate, see Technical notes.]

Marital status of mother and race of child	All ages[1]	Age of mother						
		15–17 years	18–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40 years and over
All births[2]	77.1	9.5	53.9	77.3	88.6	89.9	82.6	70.2
White	80.1	9.7	53.3	78.8	90.5	91.8	85.5	74.7
Black	64.6	9.2	55.9	72.2	78.7	79.0	69.0	56.2
Births to married women[2]	83.3	11.4	56.2	81.0	90.9	91.7	85.2	73.6
White	84.0	11.2	55.9	81.4	91.8	92.8	87.1	76.9
Black	79.9	15.6	61.6	80.1	84.8	84.0	74.2	61.2
Births to unmarried women[2]	50.8	8.5	50.7	63.2	67.2	67.2	57.5	47.6
White	48.0	8.0	46.7	59.0	65.1	66.8	58.5	50.5
Black	53.0	8.9	54.7	66.7	68.8	67.6	56.5	45.2

[1]Includes birth to mothers under 15 years of age, not shown separately.

[2]Includes races other than white and black.

NOTE: Excludes data for California, Texas, and Washington, which did not require reporting of educational attainment of mother.

Table 9. Percent of infants of low birth weight by age and marital status of mother and race of child: United States, 1981

[Low birth weight is equivalent to less than 2,500 grams, or 5 lb. 8 oz.]

Marital status of mother and race of child	All ages	Age of mother							
		Under 15 years	15–17 years	18–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40 years and over
All births[1]	6.8	14.0	10.6	8.8	7.0	5.8	5.8	7.1	8.4
White	5.7	10.4	8.7	7.2	5.8	5.0	5.0	6.2	7.4
Black	12.5	16.7	14.6	13.6	12.5	11.4	11.3	12.4	13.4
Births to married women[1]	5.7	10.4	8.6	7.1	5.8	5.2	5.3	6.5	7.7
White	5.2	9.6	8.2	6.7	5.3	4.8	4.8	5.9	7.1
Black	10.1	18.8	13.4	11.8	10.4	9.5	9.7	10.8	11.6
Births to unmarried women[1]	11.5	14.4	11.8	11.2	11.3	11.5	11.8	12.6	13.5
White	8.9	10.6	9.1	8.7	8.7	8.9	9.2	10.2	10.9
Black	14.4	16.6	14.7	14.1	14.0	14.5	15.1	16.2	17.4

[1]Includes races other than white and black.

Table 10. Percent distribution of live births by month of pregnancy prenatal care began, according to age of mother and race of child: United States, 1981

Month of pregnancy prenatal care began and race of child	All ages	Age of mother: Under 15 years	15–17 years	18–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40 years and over
All races[1]									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1st-2d month	52.0	17.2	25.4	34.1	49.4	60.2	61.1	54.2	42.1
3d month	24.3	18.4	23.6	25.2	25.0	23.7	23.6	24.6	25.1
4th-6th month	18.5	44.3	38.6	31.2	19.9	12.9	12.3	16.6	24.7
7th-9th month	3.8	14.6	9.1	7.2	4.2	2.4	2.2	3.2	5.7
No prenatal care	1.4	5.5	3.3	2.4	1.5	0.8	0.8	1.4	2.5
White									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1st-2d month	55.0	18.0	26.8	35.9	52.1	62.5	63.1	56.2	44.0
3d month	24.4	18.9	24.6	25.9	25.2	23.6	23.4	24.5	25.2
4th-6th month	16.3	41.5	37.0	29.5	17.9	11.3	11.0	15.3	23.5
7th-9th month	3.2	15.7	8.7	6.6	3.6	1.9	1.9	2.9	5.2
No prenatal care	1.1	5.9	2.8	2.0	1.2	0.6	0.7	1.1	2.2
Black									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1st-2d month	38.6	16.9	22.7	28.8	38.0	47.0	49.6	43.4	34.7
3d month	23.9	18.0	21.7	23.1	24.3	24.3	24.5	25.3	25.2
4th-6th month	28.5	46.5	41.9	36.1	28.5	22.1	20.1	23.9	30.1
7th-9th month	6.2	13.4	9.6	8.4	6.4	4.3	3.8	4.5	6.8
No prenatal care	2.8	5.2	4.1	3.5	2.8	2.2	2.0	2.9	3.6

[1]Includes races other than white and black.

Table 11. Percent of births with 1-minute and 5-minute Apgar scores less than 7, by age of mother and race of child: Total of reporting States, 1981

Apgar score and race of child	All ages	Age of mother: Under 15 years	15–17 years	18–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40 years and over
1-minute Apgar score[1]									
All races[2]	9.8	15.0	12.5	11.4	9.8	8.9	9.1	10.7	13.0
White	9.3	14.8	12.1	11.0	9.4	8.5	8.6	10.0	12.2
Black	12.2	15.0	13.3	12.5	11.5	11.6	12.7	14.3	15.9
5-minute Apgar score[3]									
All races[2]	2.1	4.2	3.1	2.5	2.1	1.8	1.9	2.4	3.1
White	1.8	3.4	2.7	2.2	1.8	1.6	1.6	2.1	2.7
Black	3.4	4.7	3.9	3.5	3.2	3.3	3.5	4.1	4.3

[1]Total of 46 reporting States. Excludes data for California, Delaware, District of Columbia, Oklahoma, and Texas.

[2]Includes races other than white and black.

[3]Total of 46 reporting States and the District of Columbia. Excludes data for California, Delaware, Oklahoma, and Texas.

Appendix
Technical notes

Sources of data

Data shown in this report for the period 1972-81 are based on 100 percent of the birth certificates from States participating in the Vital Statistics Cooperative Program and on a 50-percent sample of births from all other States. Beginning in 1972, States providing data through the cooperative program were Florida, Maine, Missouri, New Hampshire, Rhode Island, and Vermont. The following States were added in subsequent years: Colorado, Michigan, and New York (excluding New York City) in 1973; Illinois, Iowa, Kansas, Montana, Nebraska, Oregon, and South Carolina in 1974; Louisiana, Maryland, North Carolina, Oklahoma, Tennessee, Virginia, and Wisconsin in 1975; Alabama, Kentucky, Minnesota, Nevada, Texas, and West Virginia in 1976; Alaska, Idaho, Massachusetts, Ohio, and New York City in 1977; Indiana, Utah, and Washington in 1978; Connecticut, Hawaii, Mississippi, New Jersey, Pennsylvania, and Wyoming in 1979; and Arkansas and South Dakota in 1980. Data for 1970-71 are based on a 50-percent sample of births.

Population denominators

Birth rates for 1981 are based on populations estimated as of July 1, 1981. Rates for 1980, except those by marital status, are based on populations enumerated as of April 1, 1980. Rates by marital status are estimated as of July 1 for all years. The figures by race in the 1980 census are affected by changes in the practice of reporting race, particularly on the part of the Hispanic population, and in coding and classifying racial groups in the 1980 census. In order to maintain comparability for years prior to 1980, the 1980 census data by race have been redistributed to conform to the historical categories. Unpublished tabulations of these modified census counts were obtained from the U.S. Bureau of the Census and were used for the computation of the rates for this report.

Birth rates for 1971-79 based on populations estimated as of July 1, have been revised and therefore may differ from those published in *Vital Statistics of the United States*, Volume I, Natality, for 1979 and earlier years. The revised rates, which were first published in November 1982,[6] are based on revised populations for these years which are consistent with the 1980 census levels.[7] The 1980 census counted approximately 5.5 million more persons than had earlier been estimated for April 1, 1980.[8]

Births by marital status of mother

Beginning with 1980 data, national estimates of births to unmarried women are derived from two sources. For 41 States and the District of Columbia, marital status of the mother is reported directly on the birth certificate; for the remaining 9 States which lack such an item, marital status is inferred from a comparison of the child's and parents' surnames. The previous method assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division. Ratios of births to unmarried women were computed by race for the reporting States in each geographic division, applied to all births in the division, and then summed to obtain national estimates by race. The figures by race were summed to yield the totals for the United States.

The new method represents an attempt to use related information on the birth certificate to improve the quality of national data on this topic as well as to provide data for the individual nonreporting States. This method is based on a comparison of the parents' and child's surnames. Briefly, a birth is classified as occurring to a married woman if the parents' surnames are the same or if the child's and father's surnames are the same and the mother's current surname is missing. A birth is classified as occurring to an unmarried woman if the father's name is missing, if the parents' surnames are different, or if the father's and child's surnames are different and the mother's current surname is missing.

Computation of percent distributions

Births of unknown live-birth order, educational attainment of mother, month of pregnancy that prenatal care began, birth weight, and Apgar score were subtracted from total births before percent distributions were computed.

NOTE: A list of references follows the text.

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